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BEFORE THE ARIZONA CORPORATION COMMISSION

TOM FORESE, Chairman
BOB BURNS, Commissioner
DOUG LITTLE, Commissioner
ANDY TOBIN, Commissioner
BOYD W. DUNN, Commissioner

IN THE MATTER OF THE APPLICATION OF ARIZONA PUBLIC SERVICE COMPANY FOR A HEARING TO DETERMINE THE FAIR VALUE OF THE UTILITY PROPERTY OF THE COMPANY FOR RATEMAKING PURPOSES, TO FIX A JUST AND REASONABLE RATE OF RETURN THEREON, TO APPROVE RATE SCHEDULES DESIGNED TO DEVELOP SUCH RETURN.	**Docket No.: E-01345A-16-0036**
IN THE MATTER OF FUEL AND PURCHASED POWER PROCUREMENT AUDITS FOR ARIZONA PUBLIC SERVICE COMPANY.	**Docket No.: E-01345A-16-0123** **NOTICE OF FILING DIRECT TESTIMONY OF SARA BIRMINGHAM AND R. THOMAS BEACH IN SUPPORT OF THE SETTLEMENT AGREEMENT**

The Solar Energy Industries Association, ("SEIA"), through its undersigned counsel, hereby provides notice that it has filed the attached direct testimony of Sara Birmingham and R. Thomas Beach in support of the proposed settlement agreement.

DATED this 3rd day of April, 2017

/s/ Giancarlo G. Estrada

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I hereby certify that I have this day served a copy of the foregoing document on all parties of record in this proceeding by regular or electronic mail:

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DIRECT TESTIMONY OF R. THOMAS BEACH IN SUPPORT OF THE SETTLEMENT AGREEMENT

On behalf of the

Solar Energy Industries Association

Docket No. E-01345A-16-0036
Docket No. E-01345A-16-0123

April 3, 2017

Direct Testimony of R. Thomas Beach in Support of the Settlement Agreement

On behalf of the Solar Energy Industries Association Docket No. E-01345A-16-0036 and E-01345A-16-0123

I. INTRODUCTION AND QUALIFICATIONS

Q1: Please state for the record your name, position, and business address.

A1: My name is R. Thomas Beach. I am principal consultant of the consulting firm Crossborder Energy. My business address is 2560 Ninth Street, Suite 213A, Berkeley, California 94710.

Q2: Please describe your experience and qualifications.

A2: My experience and qualifications are described in the attached *curriculum vitae* (CV), which is Exhibit RTB-1 to the direct testimony I submitted in this proceeding on February 3, 2017. As reflected in my CV, I have more than 35 years of experience on rate design and ratemaking issues for natural gas and electric utilities. I graduated from Dartmouth College in 1977 with a B.A. in English and physics. In 1980, I completed an M.E. degree in mechanical engineering from the University of California at Berkeley. I am a registered professional engineer in the state of California. I began my career in 1981 on the staff at the California Public Utilities Commission (CPUC), working on the implementation of the Public Utility Regulatory Policies Act. From 1984-1989, I was an advisor to three CPUC commissioners. Since 1989, I have had a private consulting practice on energy issues and have appeared, testified, or submitted testimony, studies, or reports on numerous occasions before state regulatory commissions in Arizona and nineteen other states. My CV includes a list of the formal testimony that I have sponsored in various state regulatory proceedings concerning electric and gas utilities.

Q3: Please describe more specifically your experience on rate design and the rates applicable to renewable distributed generation (DG) resources.

A3: Over the last decade, I have sponsored testimony on rate design issues concerning solar DG in Arizona, California, Colorado, Idaho, Massachusetts, New Hampshire, Nevada, and Texas. This includes representing several solar industry groups in the CPUC's major investigation from 2012-2015 into residential rate design in California. In 2014-2015, I participated in the Hawaii Public Utilities Commission's investigation into distributed generation and net energy metering (NEM) by designing a new residential time-of-use (TOU) rate for the Hawaiian investor-owned utilities. With respect to benefit-cost issues concerning renewable DG, I have sponsored testimony on NEM and solar economics in Arizona, California, Colorado, Idaho, Minnesota, Nevada, New Hampshire, New Mexico, North Carolina, South Carolina, Texas, and Virginia. I also co-authored the chapter on Distributed Generation Policy in *America's Power Plan*, a report on emerging energy issues, which was released in 2013 and is designed to provide policymakers with tools (including rate design changes) to address key questions concerning distributed generation resources.[1] In the last four years, I have co-authored benefit-cost studies of NEM or solar DG in Arizona, California, Colorado, New Hampshire, and North Carolina, including benefit-cost studies of solar DG on the Arizona Public Service (APS) system in 2013 and 2016.[2]

[1] This report has been published in *The Electricity Journal*, Volume 26, Issue 8 (October 2013). It is also available at http://americaspowerplan.com/ .

[2] The Arizona studies are *The Benefits and Costs of Solar Distributed Generation for Arizona Public Service* (May 2013), available at http://www.seia.org/sites/default/files/resources/AZ-Distributed-Generation.pdf, and the update to this study from February 2016 which is in the record of the Value of Solar Docket No. E-00000J-14-0023, submitted as an exhibit to my testimony in that case on behalf of The Alliance for Solar Choice.

Q4: Have you testified or appeared previously before this Commission?

A4: Yes, I have. I sponsored testimony on behalf of The Alliance for Solar Choice (TASC) in the Value of Solar Docket No. E-00000J-14-0023. I also testified on behalf of the Energy Freedom Coalition of America (EFCA) in Tucson Electric Power's Renewable Energy Standard and Tariff (REST) proceeding, Docket No. E-01933A-15-0239. I also filed testimony in this proceeding on February 3, 2017 on behalf of the Solar Energy Industries Association (SEIA).

Q5: On whose behalf are you testifying today?

A5: I am appearing on behalf of SEIA. SEIA is the national trade association of the United States solar industry. Through advocacy and education, SEIA and its 1,000 member companies work to make solar energy a mainstream and significant energy source by expanding markets, removing market barriers, strengthening the industry, and educating the public on the benefits of solar energy. SEIA's members have a strong interest in the adoption and implementation of innovative, forward-looking policies and programs that will accelerate the development of solar photovoltaic (PV) generation. The views contained in this testimony represent the position of SEIA as an organization, but not necessarily the views of any particular member with respect to any issue.

Q6: What is the purpose of your testimony?

A6: My testimony addresses the reasonableness of the Resource Comparison Proxy Rate (RCP) that is addressed in Section 18.3 of the Settlement Agreement. For the reasons explained below, the settled RCP price of 12.9 cents per kWh is a resaonable outcome for settling the RCP price.

II. REASONABLENESS OF THE RCP PRICE FOR DG EXPORTS

Q7: Section 18.3 of the Settlement Agreement provides that "[t]he Resource Comparison Proxy Rate ("RCP") for exported energy established in Decision No. 75859, as amended by Decision No. 75932, will be $0.129/kWh in year one, which is inclusive of undifferentiated transmission, distribution, and loss components. This export rate will be calculated using a 2015 base year with an adjustment to achieve the final export rate." Please explain the background for this term of the settlement.

A7: At issue in this case is the detailed implementation of the RCP price for energy exported to APS from distributed generation (DG) facilities on the APS system. The methodology and broad policies for the RCP were established in the Commission's "Value of Solar" Decision No. 75859, as amended by Decision No. 75932. These orders establish an RCP price (in $ per kWh) based on, as a proxy, the levelized cost of all grid-scale solar photovoltaic facilities that have gone into service on the APS system in the last five years. Decision No. 75859, at page 152 (lines 13-14), decided that the RCP price also should include "avoided transmission, distribution capacity and line losses." In requiring consideration of these avoided delivery costs that result from the addition of solar DG, the Commission stated that "[in] order for the comparison between central station solar and DG to be meaningful and accurate, these key differences must be addressed and included in the Resource Comparison Proxy analysis that will occur in the rate cases."[3]

Q8: Did APS present testimony in this case on how to implement the RCP price adopted in the Value of Solar docket?

A8: Yes. In the Value of Solar case (Docket No. E-00000J-14-0023) APS developed and presented a spreadsheet model of the levelized busbar cost of its grid-scale solar facilities – both utility-owned projects as well as third-party units from which APS purchases the

[3] Decision No. 75859, page 152, lines 14-17.

power through power purchase agreements (PPAs). This model produced a busbar cost of APS's solar facilities of 10.9 cents per kWh. In this case, APS sponsored the supplemental testimony of Messrs. Burke and Miessner, presenting APS's proposed RCP price based again on certain specific calculations using the spreadsheet model. APS also added 3.72% avoided line losses at voltage levels up to 69 kV, but no avoided transmission and distribution (T&D) costs. The final resulting RCP price in the APS testimony was 11.524 cents per kWh.[4]

Q9: If a settlement had not been reached in this case before the due date for intervenor testimony on RCP issues, would SEIA have contested certain elements of the APS RCP calculation?

A9: Yes. In particular, SEIA would have contested, first, APS's assumptions for avoided line losses, and, second, its exclusion of any avoided T&D capacity costs from the RCP calculation.

Q10: Please discuss SEIA's litigation position on avoided line losses.

A10: SEIA's position would have been that APS also should have included, at a minimum, its full average or marginal system losses at all voltage levels, including at voltages of 69 kV and above, in addition to the 3.72% average losses for voltages of 69 kV and below.

APS excluded the losses at the higher voltages based on an assertion that none of the utility-scale solar facilities on the APS system delivers power to the grid at voltages greater than 69 kV.[5] However, this does not mean that higher voltage facilities are not used to deliver utility-scale solar to APS customers. Power that is received into the APS system at 69 kV can be stepped up to higher voltages, and then transmitted to APS's load

[4] See Supplemental Direct Testimony of Jeffrey Burke for APS (served December 30, 2016), at pp. 4-6; hereafter, "APS Burke testimony.".

[5] APS Burke testimony, at p. 5.

centers, before it is stepped down in voltage for delivery to customers. This can result in losses that are higher than system average losses at all voltage levels, so the use of system average losses at all voltage levels may be conservative, i.e. on the low side. In fact, in recent years, APS has been building, in phases, new 500 kV lines from the Yuma area to the Palo Verde hub and then to the Phoenix load center, all with a stated purpose of accessing utility-scale solar and natural gas resources in the Yuma and Palo Verde areas.[6] If these 500 kV lines are needed to transmit utility-scale solar to the APS load center in Phoenix, then certainly utility-scale solar resources should be assessed line losses at all voltages up to and including 500 kV.

Thus, at a minimum, APS should have used the 2.5% average losses above 69 kV to the 3.7% average losses at 69 kV and below, for total system average losses of 6.2%.

Further, to quantify the line loss impacts of solar DG on a marginal cost basis, SEIA recommends the industry standard approach for quantifying the avoided losses that is included in the benefit/cost study of solar DG on the APS system that The Alliance for Solar Choice (TASC) presented in the Value of Solar docket. TASC's approach followed the marginal or avoided line loses calculations in two prior studies of solar DG benefits that APS commissioned. In these studies, the marginal or avoided line losses for solar DG on the APS system are calculated to be 12.1%.[7]

Q11: What is SEIA's litigation position on avoided T&D capacity costs for APS?

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[6] These are the North Gila to Palo Verde 500 kV line and the segments of the Palo Verde to Morgan 500 kV line. The purpose of these lines to access solar and gas resources are stated in APS's Renewable Transmission Plan and its recent 10-year Transmission Plans.

[7] Direct Testimony of R. Thomas Beach on behalf of TASC (Docket No. E-00000J-14-0023), served February 25, 2016, at Exhibit 2 (hereafter "TASC's APS DG Benefit/Cost Study"), at pp. 8 and 12. This approach uses the methodology for avoided line losses that R.W. Beck and SAIC developed in their 2009 and 2013 DG benefit/cost studies for APS.

A11: APS's Mr. Miessner argues that APS's avoided transmission costs from solar DG are zero, because exports from solar DG were only 8 MW during a single peak hour in 2015. However, looking at a single peak hour in a single year does not follow APS's own cost of service study, which uses the four summer monthly coincident peak demands (4 CP) to allocate transmission costs, four summer monthly non-coincident peak demands (4 NCP) to allocate primary distribution costs, and the sum of individual maximum demands to allocate secondary distribution costs. SEIA's testimony in this case showed that solar customers avoid a significant fraction of APS's T&D costs for residential customers on an embedded cost of service basis, as shown in **Table 1** below, which is a slightly expanded version of Table 3 from SEIA's direct testimony, to emphasize the change in T&D costs resulting from solar DG.

Table 1: *Change in APS Residential Embedded T&D Costs due to Solar*

Cost Component	**Basis for Cost Allocation**	**Average Cost** *($/MWh)*	**Cost Reduction due to Solar** *(%)*	**T&D Cost Reduction due to Solar** *($/MWh)*
Energy	Annual Energy	$33.57	-30%	
Production Demand	4CP / 4 NCP	$37.26	-38%	
Transmission	4CP	$8.50	-42%	-$3.57
Distribution – Primary & Substations	4 NCP	$14.51	-33%	-$4.79
Distribution – Secondary	Sum of Individual Max Demands	$7.60	-10%	-$0.76
All Categories (Wtd. by Average Cost)		$101.44	-33%	
Total Reduction in Embedded T&D Costs				**-$9.12**

On a marginal cost basis, APS's avoided T&D capacity costs are even higher. TASC presented this evidence in its direct testimony in the Value of Solar docket.[8] The following **Table 2** summarizes this evidence.

Table 2: *APS Residential Marginal / Avoided T&D Capacity Costs due to Solar*

Panel Orientation	**Avoided T** *($/MWh)*	**Avoided D** *($/MWh)*	**Avoided T&D** *($/MWh)*

[8] TASC's APS DG Benefit/Cost Study, pp. 13-16, esp. Tables 5 and 6.

South-facing	9	15	24
West-Facing	16	32	48
Average	12.5	23.5	36

Q12: Please summarize SEIA's litigation position on the total RCP price, including the line losses and T&D costs that solar DG avoids.

A12: SEIA's litigation position is summarized in **Table 3**, on both an embedded and a marginal cost basis, and is expressed in cents per kWh.

Table 3: *SEIA's Litigation Position on the APS RCP*

Method	**Utility-scale Solar Busbar Costs** *(cents/kWh)*	**Line Losses** *(%)*	**Avoided T&D, from Tables 1 and 2** *(cents/kWh)*	**Total RCP Price** *(cents/kWh)*
Embedded Costs	11.1	6.2%	0.9	12.7
Marginal Costs	11.1	12.1%	3.6	16.0

Q13: In light of the APS and SEIA litigation positions, why is the proposed settlement RCP of 12.9 cents per kWh reasonable?

A13: The Settlement is above the APS litigation position, at the low end of SEIA's litigation position, and well below what SEIA would have recommended based on APS's marginal or avoided T&D costs. Thus, the settlement is well within the range of possible outcomes for the litigation of the RCP price. The settled RCP price of 12.9 cents per kWh is close to the RCP price that would result from a T&D adder based on system line losses (6.2%) and a reasonable assessment of the change in APS's T&D cost of service that results from the addition of behind-the-meter solar DG instead of utility-scale solar.

Q14: Does this conclude your prepared testimony in support of the Settlement Agreement?

A14: Yes, it does.

DIRECT TESTIMONY OF SARA BIRMINGHAM IN SUPPORT OF THE SETTLEMENT AGREEMENT

On behalf of the

Solar Energy Industries Association

Docket No. E-01345A-16-0036
Docket No. E-01345A-16-0123

April 3, 2017

Direct Testimony of Sara Birmingham in Support of the Settlement Agreement
On behalf of the Solar Energy Industries Association
Docket Nos. E-01345A-16-0036 and E-01345A-16-0123

I. INTRODUCTION AND QUALIFICATIONS

Q1: Please state your name, position, and business address for the record.

A1: My name is Sara Birmingham. I am the Senior Director of State Affairs for the Solar Energy Industries Association ("SEIA"). My business address is 3300 NE 157th Pl, Portland, OR.

Q2: Please describe your experience and qualifications.

A2: I am a Senior Director for State Affairs for the Solar Energy Industries Association. Prior to joining SEIA in 2012, I was the Western Director for Policy for the Solar Alliance since 2007, with a focus on legislative and regulatory activity in California. I have been involved in renewable and clean distributed generation and energy efficiency since 1998 when I began my career at Pacific Gas and Electric Company. I have a BS in Environmental Engineering with an emphasis in Renewable Energy from Humboldt State University.

Q3: Have you testified or appeared previously before this Commission?

A3: No, I have not. However, I have testified before the Colorado, California and Nevada Public Utilities Commissions.

Q4: On whose behalf are you testifying today?

A4: I am appearing on behalf of SEIA. SEIA is the national trade association of the United States solar industry. Through advocacy and education, SEIA and its 1,000 member companies work to make solar energy a mainstream and significant energy source by expanding markets, removing market barriers, strengthening the industry, and educating the public on the benefits of solar energy. SEIA's members have a strong interest in the adoption and implementation of innovative, forward-looking policies and programs that will accelerate the development of solar photovoltaic generation. The views contained in this testimony represent the position of SEIA as an organization, but not necessarily the views of any particular member with respect to any issue.

Q5: What is the purpose of your testimony?

A5: The purpose of my testimony is to support the reasonableness of the Settlement Agreement from SEIA's perspective. In particular, my testimony focuses on: (1) the reasonableness of providing non-discriminatory rate options to solar customers, (2) the reasonableness of the proposed TOU-E rate design, (3) the reasonableness of the Resource Comparison Proxy ("RCP") payment level for distributed generation customers' exports of electricity to the APS system, (4) the reasonableness of the grandfathering provisions that apply to solar customers that submit completed interconnection applications prior to the rate effective date of the final decision issued in this proceeding, and (5) the reasonableness of the revenue requirement provisions of the Settlement Agreement.

II. REASONABLENESS OF THE SETTLEMENT AGREEMENT

Q6. Does SEIA support the Settlement Agreement?

A6. Yes. SEIA actively participated in the settlement discussions that led up to the Settlement Agreement. Although the Settlement Agreement does not include all of the outcomes that SEIA's members would have liked to achieve, SEIA believes the terms of the Settlement Agreement, when viewed in their totality, are just, reasonable, fair, and in the public interest.

Q7. Does SEIA believe the rate options provided to solar customers under the Settlement Agreement are reasonable?

A7. Yes. Section 18.1 of the Settlement Agreement provides that residential distributed generation ("DG") customers will be eligible for four different rate schedules, including all proposed TOU and demand schedules.

SEIA strongly supports the continued availability of TOU rate options for both DG and non-DG customers. The direct testimony of R. Thomas Beach, which was submitted by SEIA on February 3, 2017, explains why TOU rates are more accurate and cost-based for both DG and non-DG customers than demand rates.[1] For this reason, SEIA supports the continued availability of a TOU rate option, as provided for in the Settlement Agreement.

SEIA also supports the Settlement Agreement's provision of comparable rate options for DG and non-DG customers. SEIA believes the provision of comparable rate treatment is a reasonable outcome that treats DG and non-

[1] Pages 13-25.

DG customers of APS in a non-discriminatory manner. Although several flat rate options will be unavailable to DG customers in the near term, Section 19.1 of the Settlement Agreement explains that flat rate options will largely be phased out after May 1, 2018, at least for larger residential customers.

Q8. Does SEIA support the TOU-E rate that will be available to DG and non-DG customers under the Settlement Agreement?

A8. Yes. Section 17.4 of the Settlement Agreement describes the proposed TOU-E rate design that the Settlement Agreement proposes to make available to both DG and non-DG customers. The TOU-E rate schedule itself is contained in Appendix F of the Settlement Agreement. SEIA supports the proposed TOU-E rate and believes that it is just and reasonable.

A key difference between the charges imposed on DG customers versus non-DG customers under the TOU-E rate is the application of a "Grid Access Charge" of $0.93/kW-DC of installed generating capacity for DG customers that take service under the TOU-E tariff. Sections 17.4, 18.1, and 18.2 of the Settlement Agreement explain that the Grid Access Charge is intended to achieve a "self-consumption offset rate" for DG customers taking service under the TOU-E rate of $0.105/kWh, inclusive of the Grid Access Charge and exclusive of rate riders and taxes. In this respect, the Grid Access Charge allows DG customers to take service under the same tariff that is available to non-DG customers by applying an additional fee that results in a total "offset value" to DG customers of $0.105/kWh for electricity that is generated and immediately consumed onsite by solar customers without export to the APS system.

It is important to understand that the $0.105/kWh offset value included in the Settlement Agreement is an average value. Section 18.2 of the Settlement Agreement explains: "The offset rate is based on the load profile and production profile of APS customers with DG during the test year." However, "[i]ndividual customer offset will vary based on individual usage patterns and DG system size, orientation, and production." As such, the "self-consumption offset rate" of $0.105/kWh is an average value. Solar DG customers that take service under the TOU-E rate and pay the $0.93/kW-DC Grid Access Charge may achieve a lower or higher offset value than $0.105/kWh.

The direct testimony of R. Thomas Beach, submitted on February 3, 2017, supports a higher offset value of 13.6 cents with no Grid Access Charge.[2] However, in the interest of achieving settlement, SEIA agreed to accept a lower offset value, which is achieved by applying the Grid Access Charge of $0.93/kW-DC to DG customers.

Another area in which SEIA agreed to accept an outcome that differs from SEIA's litigation position is with respect to the on-peak period in APS's TOU and demand rates. Section 17.8 of the Settlement Agreement provides for a 3:00 pm to 8:00 pm on-peak period for the TOU and demand rates that are available to DG customers. The February 3, 2017 direct testimony of R. Thomas Beach proposes peak periods for these tariffs of 2:00 pm to 7:00 pm.[3] However, in the interest of achieving settlement, SEIA has agreed to support a later on-peak period of 3:00 pm to 8:00 pm.

[2] Page 43, Table 8.
[3] Pages 38-41.

Q9. Does SEIA support the Resource Comparison Proxy Rate ("RCP") of $0.129/kWh kWh for year one?

Q9. Yes. The RCP is the rate that DG customers will receive for electricity that is exported to the APS system because it is not immediately needed by a DG customer onsite. Section 18.3 of the Settlement Agreement provides for an initial RCP rate of $0.129/kWh, which will be available for the first year following the rate effective date of the Commission's final decision in this proceeding. The RCP value is "inclusive of undifferentiated transmission, distribution, and loss components," which is consistent with Decision Nos. 75859 and 75932. Also consistent with Decision Nos. 75859 and 75932, the RCP rate will be updated annually, but it will not be reduced from one year to the next by more than 10%.

Attachment H to the Settlement Agreement contains the rate riders that will implement the RCP as well as a plan of administration for updating the RCP value on an annual basis. As set forth in the RCP Rate Rider in Appendix H, customers that interconnect a solar system after the rate effective date of the Commission's final decision in this proceeding will receive the RCP rate in effect at the time they submit a completed interconnection application for their system, provided that they subsequently complete their system interconnection and obtain approval from authorities having jurisdiction within 180 days. The RCP Rate Rider provides an extension of up to 270 days if a delay in completing the interconnection and receiving approval is through no fault of the customer or the customer's installer. Consistent with Decision Nos. 75859 and 75932, the customer will receive the RCP rate that is then in effect for 10 years from the time of their interconnection.

In addition to my testimony in support of the Settlement Agreement, SEIA is also submitting testimony of R. Thomas Beach in support of the Settlement Agreement. Mr. Beach's testimony supports setting the initial RCP rate for year one at $0.129/kWh. As explained in Mr. Beach's testimony, the $0.129/kWh export rate is well below what SEIA would have recommended based on APS's marginal or avoided T&D costs. Accordingly, this is another area in which SEIA has agreed to an outcome different than what it believes is justified in the interest of achieving settlement.

Q10. Does SEIA support the grandfathering of net-metered customers provided for in the Settlement Agreement?

A10. Yes. Sections 18.5 and 18.6 of the Settlement Agreement allow customers that submit completed interconnection applications before the rate effective date adopted in the final decision in this proceeding to take service under full retail net metering and to continue to take service on their current tariff schedules for a period of 20 years from the date a system is interconnected with APS. SEIA believes this outcome is consistent with Decision No. 75859.

Q11. Are there any issues of importance to SEIA members that are not addressed in the Settlement Agreement?

A11. Yes. As I stated above, the Settlement Agreement does not include all of the outcomes that SEIA's members had hoped to achieve. In particular, SEIA's members are concerned that neither Decision Nos. 75859 and 75932, nor the Settlement Agreement, provide transparency with respect to the export rate that customers will receive at the end of the 10-year RCP payment period. Solar systems typically produce electrical output for periods of 20 years or

longer. I understand that it can be difficult for SEIA's members to finance solar systems over a typical 20-year or longer period when the value of exported power, which can amount to 50% or more of the electricity that customers generate on-site with solar systems, is unknown. SEIA's members are concerned that the uncertainty of payment levels after year 10 will impact their ability to finance systems under typical leasing arrangements that look to recover the cost of an installed system over the useful life of the of a solar system, which is 20-years or longer.

Although this issue was not resolved in the Settlement Agreement, SEIA supports the Settlement Agreement and believes that it reasonably balances APS's rate increase with benefits for customers. SEIA looks forward to working with APS, the Commission, and interested parties in future proceedings to provide greater transparency and predictability for payment levels beyond 10 years for customers that install solar systems after the rate effective date of the final decision in this proceeding.

Q12. Does this conclude your testimony?

A12. Yes, it does.